Record Nr. UNINA9910410005603321 Applications in Electronics Pervading Industry, Environment and Society Titolo : APPLEPIES 2019 / / edited by Sergio Saponara, Alessandro De Gloria Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2020 **ISBN** 3-030-37277-4 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XIII, 562 p. 261 illus., 208 illus. in color.) Lecture Notes in Electrical Engineering, , 1876-1100 ; ; 627 Collana 621.381 Disciplina Soggetti Electronic circuits Electronics Microelectronics Electrical engineering Computers **Electronic Circuits and Devices** Electronics and Microelectronics, Instrumentation Communications Engineering, Networks Information Systems and Communication Service Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Advanced Radiation Sensors VLSI Design in CMOS technology for High Energy Physics Applications -- Design, Operation and BER Test of Multi-Gb/s Radiation-Hard Drivers in 65 nm Technology for Silicon Photonics Optical Modulators -- A rad-hard bandgap voltage reference for High Energy Physics experiments -- Analysis and Comparison of Ring and LC-tank Oscillators for 65 nm Integration of Rad-Hard VCO for SpaceFibre Applications -- A Compact Gated Integrator for Conditioning Pulsed Analog Signals. This book provides a thorough overview of cutting-edge research on Sommario/riassunto electronics applications relevant to industry, the environment, and society at large. It covers a broad spectrum of application domains. from automotive to space and from health to security, while devoting special attention to the use of embedded devices and sensors for

imaging, communication and control. The book is based on the 2019

ApplePies Conference, held in Pisa, Italy in September 2019, which brought together researchers and stakeholders to consider the most significant current trends in the field of applied electronics and to debate visions for the future. Areas addressed by the conference included information communication technology; biotechnology and biomedical imaging; space; secure, clean and efficient energy; the environment; and smart, green and integrated transport. As electronics technology continues to develop apace, constantly meeting previously unthinkable targets, further attention needs to be directed toward the electronics applications and the development of systems that facilitate human activities. This book, written by industrial and academic professionals, represents a valuable contribution in this endeavor.